

CLAIMS

1. Method for obtaining urea prills in a prilling tower (1), comprising the step of:

- 5 - making a plurality of melt urea droplets to fall from a urea melt distributing device (4) towards an urea prills collecting bottom (6) of said prilling tower;

characterized by the fact of further comprising the step of:

- cooling said collecting bottom (6).

10 2. Method for obtaining urea prills in a prilling tower (1), comprising the step of:

- making a plurality of melt urea droplets to fall from a urea melt distributing device (4) towards an urea prills collecting bottom (6) of said prilling tower in counter-current with an upwardly flowing air flow;

15 characterized by the fact of further comprising the step of:

- cooling said collecting bottom (6).

3. Prilling tower (1) for obtaining urea prills comprising a melt urea distributing device (4) and an urea prills collecting bottom (6) characterised by the fact of further comprising:

20 - means (15) for cooling said collecting bottom (6).

4. Prilling tower according to claim 3, characterized by the fact that said cooling means (15) comprise at least an hollow element (16) placed above said collecting bottom (6) for the passage within said element (16) of a cooling fluid in heat exchange relationship with said
25 collecting bottom (6).

5. Prilling tower (1) for obtaining urea prills comprising a tubular vertical wall (2), which defines an inner chamber (3) for cooling urea melt droplets, a urea melt distributing device (4) arranged at an upper end (3a) of said chamber (3), a urea prills collecting bottom (6) arranged at a lower end (3b) of said chamber (3) and a rotating scraper
30 (10) on said collecting bottom (6) for extracting the urea prills from the prilling tower;

characterized by the fact of further comprising:

- means (15) for cooling said collecting bottom (6).

6. Prilling tower according to claim 5, characterized by the fact that said cooling means (15) comprise at least an hollow element (16) placed above said collecting bottom (6) for the passage within said element (16) of a cooling fluid in heat exchange relationship with said collecting bottom (6).

7. Prilling tower according to claim 5, characterized by the fact of further comprising means for cooling said rotating scraper (10).